

## ABSTRACT OF THE INVENTION

5 Economical processes are disclosed for recovery and refining of at least acrylic acid from a gaseous mixture such as is obtainable by gas-phase catalytic oxidation of propylene. Processes of the invention include quenching the gaseous mixture with an aqueous quench liquid to obtain an aqueous solution  
10 comprising the acid values; contacting the aqueous solution with an immiscible extraction solvent; and an integrated sequence of distillations and phase separations to recover for recycle organic components of the extraction solvent, and obtain valuable acrylic acid and acetic acid products. Advantageously, the immiscible  
15 extraction solvent is substantially free of aromatic compounds such as benzene and toluene.